

IN THE CLAIMS:

Please amend claims 1-38 and add new claim 39, as follows:

1. (currently amended) Sheet-processing machine, wherein the sheets comprise respectively a plurality of copies, comprising a plurality of modules ~~(04; 08; 31; 47; 51; 54)~~ which are passed through one after the other by the sheets to be processed, having a sheet feeder module ~~(01; 04; 07)~~ for feeding the sheets to a downstream sheet-processing module ~~(08; 31; 47; 51; 54)~~, wherein the sheet input interface ~~(17; 32; 49; 52; 56)~~ and the sheet output interface ~~(36; 53; 57)~~ of at least one of the sheet-processing modules ~~(08; 31; 47; 51; 54)~~ can optionally be coupled to sheet output interfaces ~~(07; 36; 53; 57)~~ and sheet input interfaces ~~(17; 32; 49; 52; 56)~~, respectively, of at least two other modules ~~(01; 04; 08; 31; 47; 51; 54)~~, and wherein characterized in that the sheet-processing modules optionally comprise one or more of the following modules:

- an inspection module ~~(31)~~ for monitoring the print quality of the sheets;
- a marking module ~~(47)~~ for marking a sheet as usable or unusable depending on a monitoring result of the inspection module ~~(31)~~; and
- a numbering module ~~(08)~~ for applying serial numbering to the sheets,

and wherein in that the modules are provided in such a way that the following machine assemblies can optionally be formed:

- a first assembly comprising a sheet feeder module ~~(01; 04; 07)~~ and a numbering module ~~(08)~~ directly connected in succession;
- a second assembly comprising a sheet feeder module ~~(01; 04; 07)~~, an inspection module ~~(31)~~ and a numbering module ~~(08)~~ directly connected in succession; and

- a third assembly comprising a sheet feeder module (01; 04; 07), an inspection module (31) and a marking module (47) directly connected in succession.

2. (currently amended) Sheet-processing machine according to claim 1, wherein ~~characterized in that~~ each of the interfaces have respective transport cylinders (07; 17; 32; 36; 49; 52; 53; 56; 57) for receiving a sheet from an output transport cylinder (07; 36; 53; 57) of an upstream module (04; 31; 51; 54) or for passing a sheet to an input transport cylinder (17; 32; 49; 52; 56) of a downstream module (08; 31; 51; 54).

3. (currently amended) Sheet-processing machine according to claim 2, wherein ~~characterized in that~~ a sheet transport path within a module (31; 51; 54), which has a sheet input interface that can be connected to a number of sheet output interfaces, is formed by an even number of transport cylinders (32; 33; 34; 36; 52; 53; 56; 57).

4. (currently amended) Sheet-processing machine according to claim 2 ~~or 3~~, wherein ~~characterized in that~~ the output transport cylinder (07; 36; 53; 57) of an upstream module (04; 31; 51; 54) and the input transport cylinder (17; 32; 39; 52; 56) of a downstream module (08; 31; 51; 54) have opposite directions of rotation.

5. (currently amended) Sheet-processing machine according to claim 1, wherein ~~characterized in that~~ the modules (04; 08; 31; 47; 51; 54) have their own respective side frame panels (09; 11; 13; 30; 50; 58; 59).

6. (currently amended) Sheet-processing machine according to claims 2 ~~and 5~~,  
wherein the modules have their own respective side frame panels and wherein characterized in  
~~that~~ the transport cylinders (~~07; 32; 33; 34; 36; 49; 52; 53; 56; 57~~) are fixed to the side frame  
panels (~~09; 11; 13; 30; 50; 58; 59~~).

7. (currently amended) Sheet-processing machine according to claim 5, wherein  
~~characterized in that~~ the side frame panels (~~09; 11; 13; 30; 50; 58; 59~~) of the individual  
modules (~~04; 08; 31; 47; 51; 54~~) are fixed to one another.

8. (currently amended) Sheet-processing machine according to claim 5, ~~6 or 7~~,  
wherein characterized in that the modules (~~04; 08; 31; 47; 51; 54~~) have a cut-out in which the  
side frame panels (~~09; 11; 13; 30; 50; 58; 59~~) of the modules (~~04; 08; 31; 47; 51; 54~~) can  
engage and be supported.

9. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ columns (~~35~~) can be provided for supporting the modules (~~04; 31; 51;~~  
~~56~~).

10. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ the numbering module (~~08~~) is arranged behind the inspection module (~~31~~)  
in the conveying direction of the sheets, so as to apply the numbering only to those sheets  
which have passed the quality check carried out by the inspection module (~~31~~).

11. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ a marking device (46) is arranged in the numbering module (08).

12. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ a marking device (46) is arranged upstream of a numbering unit (21; 22).

13. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ a marking device (46) is arranged on a counter-pressure cylinder (18) of a  
numbering unit (21; 22).

14. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ a marking device (46) marks an edge region of a column and/or row in  
which the fault is located.

15. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ a marking device (46) marks a column and outputs the row number in  
which the faulty printing is located.

16. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ the marking module (47) comprises a marking device (46) for applying a  
marking to sheets.

17. (currently amended) Sheet-processing machine according to ~~any of~~ claims 11 to 16, wherein ~~characterized in that~~ the marking device (46) is arranged to apply the marking as unusable selectively to individual copies or in relation to individual copies on a sheet.

18. (currently amended) Sheet-processing machine according to ~~any one of~~ claims 11 to 16, wherein ~~characterized in that~~ the marking device (46) comprises a plurality of print heads which are distributed uniformly in the direction transverse to the transport direction of the sheets.

19. (currently amended) Sheet-processing machine according to ~~any one of~~ claims 11 to 16, wherein ~~characterized in that~~ the marking device (46) is an inkjet printing unit.

20. (currently amended) Sheet-processing machine according to claim 1, wherein ~~characterized in that~~ a transport module (51) is provided.

21. (currently amended) Sheet-processing machine according to claim 1, wherein ~~characterized in that~~ an expansion module (54) is provided.

22. (currently amended) Sheet-processing machine according to claim 1, wherein ~~characterized in that~~ an inking unit module (12) is provided which, in conjunction with another module (~~08; 47; 51~~), forms a printing module (~~8, 12, 16; 47, 12, 16; 51, 12, 16~~).

23. (currently amended) Sheet-processing machine according to claim 22, wherein ~~characterized in that~~ inking unit rollers of the inking unit module (12) are mounted in side frame panels (13) which can be connected to the side frame panels (09; 11; 30; 50; 58) of the other modules (04; 08; 31; 47; 51).

24. (currently amended) Sheet-processing machine according to claim 22, wherein ~~characterized in that~~ the inking unit module (12) can be arranged on other modules (08; 47; 51).

25. (currently amended) Sheet-processing machine according to claim 22, wherein ~~characterized in that~~ the inking unit module (12) uses a cylinder (16) of the other module (08; 47; 51) as form cylinder (16) and forms a printing unit with the latter.

26. (currently amended) Sheet-processing machine according to claim 22, wherein ~~characterized in that~~ the printing module (08, 12, 16; 47, 12, 16; 51, 12, 16) uses a transport cylinder (07; 36) of a module (04; 31) adjacent to the printing module (08, 12, 16; 47, 12, 16; 51, 12, 16) as counter-pressure cylinder (07; 36).

27. (currently amended) Sheet-processing machine according to claim 22, wherein ~~characterized in that~~ the inking unit (12) is removably installed on the other module (08; 47; 51).

28. (currently amended) Sheet-processing machine according to claim 2, wherein ~~characterized in that~~ the circumference of the transport cylinders (~~07; 17; 23; 33; 34; 36; 48; 49; 52; 53; 56; 57~~) are of the same size.

29. (currently amended) Sheet-processing machine according to claim 28, wherein ~~characterized in that~~ an inking unit module (~~12~~) is provided which, in conjunction with another module (~~08; 47; 51~~), forms a printing module (~~8; 12; 16; 47; 12; 16; 51; 12; 16~~), wherein ~~in that~~ the inking unit module (~~12~~) uses a cylinder (~~16~~) of the other module (~~08; 47; 51~~) as form cylinder (~~16~~) and forms a printing unit with the latter, and wherein ~~in that~~ the form cylinder (~~16~~) and the transport cylinders (~~07; 17; 23; 33; 34; 36; 48; 49; 52; 53; 56; 57~~) are of the same size.

30. (currently amended) Sheet-processing machine according to claim 2, wherein ~~characterized in that~~ the transport cylinders (~~07; 36; 53; 57~~) of the sheet output interface (~~07; 36; 53; 57~~) and the transport cylinders (~~17; 32; 39; 52; 56~~) of the sheet input interface (~~17; 32; 39; 52; 56~~) are arranged at the same height.

31. (currently amended) Sheet-processing machine according to claim 1, wherein ~~characterized in that~~ the inspection module (~~31~~) comprises two transport cylinders (~~32; 33~~) which transport the sheets with respective different sides facing outwards, and comprises inspection devices (~~A; B~~) arranged with the two transport cylinders (~~32; 33~~) for inspecting the front and rear sides of the sheets, respectively.

32. (currently amended) Sheet-processing machine according to claim 31, wherein ~~characterized in that~~ each of the inspection devices ~~(A)~~ comprise a respective image sensor ~~(38)~~ and a respective light source ~~(37)~~ for inspection by reflection.

33. (currently amended) Sheet-processing machine according to claim 31, wherein ~~characterized in that~~ the inspection devices ~~(B)~~ comprise a UV light source and a light sensor for fluorescence produced by the UV light source.

34. (currently amended) Sheet-processing machine according to claim 31, ~~32 or 33~~, wherein ~~characterized in that~~ the inspection devices ~~(A; B)~~ comprise a magnetic field sensor.

35. (currently amended) Sheet-processing machine according to claim 31, wherein ~~characterized in that~~ a further transport cylinder ~~(34)~~ is provided with a further inspection device ~~(C)~~ for inspecting the light-transmitting capacity of the sheets.

36. (currently amended) Sheet-processing machine according to claim 35, wherein ~~characterized in that~~ the further transport cylinder ~~(34)~~ has a transparent casing, wherein ~~in that~~ the inspection device ~~(C)~~ comprises an image sensor ~~(44)~~ and a light source ~~(42)~~ for inspection by transmission, and wherein ~~in that~~ the transmitted light source ~~(42)~~ is arranged within the transparent casing of the transport cylinder ~~(34)~~.

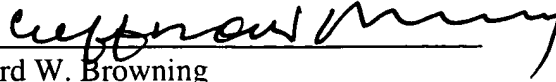


37. (currently amended) Sheet-processing machine according to claim 1, wherein  
~~characterized in that~~ the numbering module ~~(08)~~ comprises at least one numbering unit ~~(21;~~  
~~22)~~ for printing a serial number on the sheets to be processed.

38. (currently amended) Sheet-processing machine according to claim 37, wherein  
~~characterized in that~~ the numbering module ~~(08)~~ comprises two numbering units ~~(21, 22)~~  
which are arranged on a counter-pressure cylinder ~~(18)~~ with two printing segments.

39. (new) Sheet-processing machine according to claim 6, wherein the modules have  
a cut-out in which the side frame panels of the modules can engage and be supported.

Respectfully submitted,

By: 

Clifford W. Browning

Reg. No. 32,201

Woodard, Emhardt et al. LLP

111 Monument Circle, Suite 3700

Indianapolis, Indiana 46204-5137

(317) 634-3456

#381098